

Claims

1. A piezoelectric actuator with

- a multilayered structure of piezoelectric layers (2) with inner electrodes (3, 4) interspersed between them and with
- a contacting of the inner electrodes (3, 4) with outer electrodes (5, 6) on alternating sides, wherein the regions between the outer electrodes (5, 6) are provided with a suitable insulation (7, 8), characterized in that
- the insulation is a layer comprised of an adhesive band (7, 8), which covers over a predetermined region between the outer electrodes (5, 6).

2. The piezoelectric actuator according to claim 1, characterized in that

- the adhesive band is an adhesive tape (7, 8).

3. The piezoelectric actuator according to claim 1 or , characterized in that

- the band or adhesive tape (7, 8) is comprised of a precisely measured, prefabricated material.

4. A method for producing a piezoelectric actuator according to one of the preceding claims, characterized in that

- the band (7, 8) is stuck on or rolled in place in a bubble-free manner.

5. The method for producing a piezoelectric actuator according to one of claims 1 to 3, characterized in that

- the band (7, 8) is melted, vulcanized, or sintered in place in a bubble-free manner.

6. The method according to claim 4 or 5, characterized in that

-the band (7, 8) is applied through local or general area heating and/or pressure or rolling.

7. The method according to claim 6, characterized in that

-particularly at the corners or edges (9, 10, 11, 12) of the piezoelectric actuator (1), the tolerance-encumbered shape of the corners or edges (9, 10, 11, 12) is subjected to a shaping procedure.

8. The method according to one of claims 4 to 7, characterized in that

-the band (7, 8) is supplied in the form of a strip on a roll and is cut to length before or during application onto the piezoelectric actuator (1).